

REMARKS

This responds to the Final Office Action dated October 8, 2010.

No claims are amended, canceled, or added; therefore claims 1-3, 7, 9-12 and 14-30 remain pending in the application.

The Rejection of Claims Under § 103

The Examiner has rejected claims 1-3, 7, 9-12 and 14-30 under 35 U.S.C. 103(a) as being unpatentable over Carballada et al. (U.S. 5,653,969; hereinafter “Carballada”) in view of Hutchins et al. (U.S. 5,804,173; hereinafter “Hutchins”) and Hatfield et al. (E.P. 0590 604; hereinafter “Hatfield”).

The Applicant disagrees for the reasons set forth.

The ‘969 patent describes copolymers that are formed by the co-polymerization of randomly repeating A monomer units and B macromonomer units. One A monomer unit is described as methyl methacrylate. Poly(n-ethyl acrylate) is described as a B macromonomer unit. However, the ‘969 patent does not describe “**the ratio of ethyl acrylate units to methyl methacrylate units in the polymer is in the range of 7.5-8.5 : 1.8-2.3.**” Furthermore, the ‘969 reference did not anticipate that a film-forming agent selected from the group comprising one or more ethyl acrylate/methylmethacrylate **copolymers in which the ratio of ethyl acrylate units to methyl methacrylate units in the polymer is in the range of 7.5-8.5 : 1.8-2.3.**,” wherein the film-forming agent is emulsifiable with water; and a solvent selected from the group consisting of an aliphatic hydrocarbon and a volatile silicone derivate wherein the aliphatic hydrocarbon solvent and volatile silicone derivate solvent are not miscible with water and are emulsifiable with the film forming agent could be employed to form a gel having an elasticity that is 4 to 5 times greater than the elasticity of the film- forming agent alone and the gel has a softness greater than the film-forming agent. The products described in the ‘969 patent include shampoos and conditioners, “hair care compositions.” This elasticity feature claimed herein is not suitable for hair care products, such as are described in the ‘969 patent. The formulation embodiments claimed are for cosmetic products rather than hair products.

The '173 patent refers to completely different copolymers from those claimed in the application. The '173 patent describes a copolymer complex comprising:

- (1) a copolymer from A and B monomers;
- (2) a complexing fatty acid, and
- (3) a volatile hydrophobic solvent (see col. 2, 1, 13-19).

The monomer A in the '173 patent is :

t-butyl acrylate
t-butyl methacrylate
t-butylstyrene
t-ethylhexyl methacrylate

The monomer B in the '173 patent is:

NN-dialkylaminoethyl(meth)acrylate
NN-dialkaminopropyl(meth)acrylate
NN-dialkylaminopropyl(meth)acrylamide

In the claimed invention, the monomers, after restriction of claim 1 to ethyl acrylate/methylmethacrylate copolymers, are ethyl acrylate and methyl methacrylate. Both are different from the monomers described in the '173 patent. Furthermore, neither of the copolymers is complexed with a fatty acid. The Examiner responded by stating that in the Examiner's opinion, this difference was not "persuasive." The Examiner did not provide any support for this statement.

"The test is not whether each difference individually is obvious; rather, it is whether the claimed invention as a whole is obvious." In re Buchler (CCPA 1975) 515 F2d 134, 185 USPC 781.

The claimed invention is a copolymer complex that includes a copolymer and a fatty acid that has excellent temporary styling for hair and improved “wash off” features. The formulation described in the ‘173 patent describes copolymers that are different from what is claimed and a product that is water resistant and has no wash-off characteristics. The Examiner has not responded to this ground of the Applicant’s assertion of non-obviousness.

The Examiner’s reference of column 24 of the ‘173 patent is to a thickener, starting with column 23, line 39. The thickeners are crosslinked polymers, column 23, lines 40/41, and are described in greater detail in column 24, lines 5ff. Furthermore, ethacrylic acid is mentioned as a possible monomer for the thickener, but methylmethacrylic acid is not mentioned.

The ‘173 patent does not teach a use of the copolymer ethyl acrylate/methyl methacrylate. Furthermore, the claimed acrylate derivative is different from the thickener described in the ‘173 patent. As the Examiner knows, outcomes in chemistry tend to be unpredictable, which is why 112 standards for chemical patent applications are higher than for non-chemical applications. Because of this unpredictability, Applicant asserts it was not obvious for a person skilled in the art to use the teachings of the ‘173 patent for a gel claimed herein. Moreover, the ‘173 patent does not teach a use of a non-ionic emulsifier for emulsifying the copolymer. Column 24, lines 60-64 of the ‘173 patent describes its copolymer as acting only as a carrier, as described in column 24, lines 60-64 and does not disclose an emulsifying feature.

Furthermore, the Applicant could not find the Examiner’s support for the ‘173 patent teaching the “copolymer and around 60% cyclomethicone.” The examples in the ‘173 patent describe concentrations of 10.0% and 7.0%. Applicant respectfully requests the Examiner to provide the cite for this assertion.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (612) 373-6976 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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